REMARKS

Prior to this Response, claims 4-10 were pending in this application. Claims 1-3 and 11-21 were previously withdrawn under a restriction requirement. The Specification and Claim 4 have been amended. These amendments do not introduce new matter within the meaning of 35 U.S.C. §132. Basis for the amendment to the Specification is found in the accompanying receipts for deposit of biological materials for Applicants' strain CRFR 505, assigned as MTCC number 5155. Basis for the amendment to claim 4 is found on page 8, line 28; in claims 1-21 as originally filed; and elsewhere throughout the specification and claims. Accordingly, entry of the amendments is respectfully requested.

1. Objection to the Specification

The Office Action objects to the specification for the following reasons:

> The disclosure is objected to because of the following informalities: Specification is missing address of the depository collection MTCC that is presently claimed. Appropriate correction is required.

It is respectfully submitted that the amendment to insert the name and address of the depository collection MTCC obviates this objection.

Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the objection to the specification.

2. Objection to the Claims

The Office Action objects to the claims for the following reasons:

> Claims 4-10 are objected to because of the following informalities:
>
> Claim 4 contains tying error(s) such as coma in the middle of the claim text, for example: after the phrase degree C in the step (d). Appropriate correction is required.

It is respectfully submitted that there is no comma in claim 4, step (d). In order to advance prosecution, Applicants observe that there are two instances of a period following the abbreviation for degrees Celsius, i.e. "degrees C.", which Applicants believe is a fully proper and correct use. If the Examiner believes that the periods following the two temperatures described in claim 4, step (d) should be omitted, Applicants hereby consent to an Examiner's Amendment to that effect.

Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the objection to the claims.

3. Rejections under 35 U.S.C. §112, first paragraph

The Office Action rejects claims 4-10 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, and states the

following:

> At least some of the claims require one of ordinary skill in the art to have access to specific yeast strains MTCC 5155 belonging to the species of Candida versatilis. Because the microorganism is essential to the claimed invention, it must be obtainable by a repeatable method set forth in the specification or otherwise be readily available to the public.
>
> * * *
>
> Because MTCC (Microbial Type Culture Collection and Gene Bank in India) has acquired the status of an International Depository in accordance to the Budapest Treaty, a declaration stating that all restrictions will be irrevocably removed upon issuance of the patent will overcome this rejection. Please, provide the copy of the MTCC deposit receipts.
>
> Further, if the strain(s) disclosed in the instant specification are identical to the presently claimed strain MTCC 5155, please, provide an evidence (for example: deposit receipt(s) that would prove the link between the stain designation numbers.

Applicants thank the Examiner for recognizing MTCC as an accepted depository under the Budapest Treaty. As promised in the previous response in this matter, Applicants hereby provide full compliance with the deposit and availability requirements of 37 CFR §1.801, et seq.

37 CFR §1.809(b) states the requirements for responding to a rejection requiring a deposit:

> "The applicant for patent or patent owner shall reply to a rejection under paragraph (a) of this section by ... (1) In the case of an applicant for patent, either making an acceptable original, replacement, or supplemental deposit, or assuring the Office in writing that an acceptable deposit will be made prior to payment of the issue fee."

Attached to this Response, Applicants hereby provide copies of documentation of the deposit of their strain CFR 505 to the MTCC in India, and the assignment of MTCC 5155 to such deposited strain, in accord with 37 CFR §1.809(d).

Further, the undersigned counsel, on behalf of Applicants, hereby states the following: Under 37 CFR 1.808, Applicants affirm that the deposit of biological materials of strain CFR 505/MTCC 5155 has been made under the Budapest Treaty to the MTCC in India, and that all restrictions imposed by the depositor on availability to the public of the deposited material will be irrevocably removed upon issuance of a patent in this matter.

Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

4. Rejections under 35 U.S.C. §112 for Indefiniteness

The Office Action rejects claims 4-10 under 35 U.S.C. § 112, second paragraph, for the following reasons:

> Claim 4 recites the limitation "mutants" in the step (c) in the method of making dough. There is insufficient antecedent basis for this limitation in the claim since the step (a) is limited to only one mutant strain MTCC 5155.
>
> The same rejections are applied to the claims 5-8 that also recite the use of "mutants".

Applicants respectfully submit that the foregoing claim amendments obviate these rejections. In particular, it is well known that, in relation to biological organisms, "strain" refers to

multiple individuals, i.e. "a group of related individuals" or "a line of organisms descended or derived from a particular ancestral individual" (see Oxford Dictionary of Biochemistry and Molecular Biology, 2000; copy attached). Accordingly, Applicants have amended claim 4 to insert the phrase "said strain comprising yeast mutants...", to provide clear antecedent basis for subsequent uses of the plural term "mutants" in the claims.

Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

5. Rejection of Claims 4-10 under 35 U.S.C. §112 for New Matter

The Office Action rejects claims 4-10 under 35 U.S.C. §112, second paragraph, for the following reasons:

> Insertion of the limitation drawn to the use of a specific yeast strain "MTCC 5155" has no support in the as-filed specification. The insertion of this limitation is a new concept because it neither has literal support in the as-filed specification by way of generic disclosure, nor are there specific examples of the newly limited' genus that would show possession of the concept of the use of specific yeast strain "MTCC 5155". The literal support for the strain identified as "MTCC 5155" is totally missing in the as-filed specification and on the record.
>
> * * *
>
> Applicants have not provided any evidence that would establish the link between the presently claimed strain MTCC 5155 and the disclosed strains EMY 505 and CFR 505.

Applicants respectfully submit that the foregoing amendments to the specification, and supporting copies of deposit receipts

showing the deposit with the MTCC, obviate these rejections. The deposit receipts show that strain CFR 505 was deposited and was assigned number MTCC 5155.

Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

6. Rejection of Claims 4-10 under 35 U.S.C. §103(a)

The Office Action rejects claims 4-10 under 35 U.S.C. §103(a) as being unpatentable over US 4,794,014 (Siren), Quan et al. ("Production of phytase in a low phosphate medium by a novel yeast *Candida krusei*". Journal of Bioscience and Bioengineering. 2001. Vol. 92, No. 2, pages 154-160) and Bindu et al. ("A comparative study on permeabilization treatments for in situ determination of phytase of Rhodotorula gracilis". Letters in Applied Microbiology. 1998. 27:336-340). As the basis for this rejection, the Office Action states, in relevant part:

> ... US 4,794,014 (Siren) discloses a method for reducing phytic acid level in food preparations made from phytate-containing materials (IP6 materials) by using yeast cells as a source of phytase (entire document including col. 3, lines 50-65 and col. 5, lines 22-24). ... The yeast culture that is used as a source of phytase is generic and/or belongs to baker's yeast or Saccharomyces. Thus, the cited patent is lacking particular disclosure about the use of yeast cells belonging to Candida.
>
> ... Quan et al. demonstrates that yeast cells belonging to Candida produce high level of phytase (abstracts) and they are capable of biodegrading phytate in food materials including wheat.

The cited documents US 4,794,014 (Siren) and Quan et al. demonstrate that yeast cells are source of phytase but they are silent about preliminary treatments of yeast cells that are used as source of phytase in the methods for reducing phytic level in food preparation including wheat and/or wheat-containing dough.

However, the reference by Bindu et al. teaches that yeast cells have tough cell walls, that permeabilization treatments provide for a larger amount of released enzymes and that repeated cycles of freeze-thawing are most efficient for enhancing phytase activity in yeast cell preparations (entire document including abstract).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify method for reducing phytic acid level taught by US 4,794,014 (Siren) by using yeast cells belonging to Candida with a reasonable expectation of success in reducing phytic acid level in wheat containing food including dough or "Chapathi dough" because it is well known that yeast cells are used for enzymatic reduction of phytic acid levels in various food and that yeast cells belonging to Candida are source of phytase having high enzymatic activity. One of skill in the art would have been motivated to enhance enzymatic activity of yeast cell preparations by permeabilizing yeast cells through repeated freeze-thaw cycles for the expected benefits in increasing levels of phytate biodegradation.

Thus, the claimed invention as a whole was clearly prima facie obvious, especially in the absence of evidence to the contrary.

* * *

Applicants argue that the cited prior art does not teach or suggests the use of claimed strain MTCC 5155 belonging to the species of Candida versatilis (response page 12-14) and the use of the presently claimed strain relates to an improvement over the prior art (response page 14). Yet, neither improvements over the art nor possession of the claimed strain have been established by applicants on the record in order to consider the possibilities of unexpected results and/or effects, if any.

RESPONSE

Applicants respectfully traverse this rejection because the rejection misses the point of novelty of the claimed invention and thus fails to teach or suggest all the limitations of the claims.

To establish a *prima facie* case, the PTO must satisfy three requirements. First, the prior art references must teach or suggest all the limitations of the claims. In re Wilson, 165 USPQ 494, 496 (C.C.P.A. 1970). Second, as the U.S. Supreme Court very recently held in KSR International Co. v. Teleflex Inc. et el., Slip Opinion No. 04-1350, 550 U. S. ____ (April 30, 2007), "a court must... determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. ...it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does... because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." (KSR, *supra*, slip opinion at 13-15.) Lastly, the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. Amgen Inc. v. Chugai Pharm. Co., 18 USPQ2d 1016, 1023 (Fed. Cir. 1991).

The presently claimed subject matter relates to a method of

using a mutated, permeabilized strain *Candida versatilis* MTCC 5155 in optimizing the making of traditional *Chapathi* dough, by improving the process of reducing phytic acid and increasing the bioaccessibility of nutrients, thus improving the nutritional value of the *Chapathi*. In this regard, the specification at page 6, final paragraph, discloses the following:

> "The novelty of the process lies in the ability to reduce inherent anti-nutritional factor like phytic acid in traditional wheat flour based non-fermented food to a reasonable extent using permeabilized cells of phytase positive potent isolate of *Candida versatilis*. As against the more common use of yeast fermentation for deriving phytic acid reduction, there has been no attempts to evolve means to overcome anti-nutritional factors in plant-based foods, wherein fermentable is an undesirable attribute. The present process provides a biotechnological approach towards improving the nutritional status of Chapathi dough."

Thus, the present invention is directed to the improvement of the nutritional quality of dough specifically to be used in making chapathi. Chapathi is a traditional unleavened flat bread prepared from whole wheat flour. It is to be noted that the dough should not be leavened to make a good quality chapathi, as fermented dough will impart a sour taste to the chapathi, which is not desirable. Further, the dough should have a particular gluten texture as to make a circular flat bread of approximately 16 cm in diameter and 1.5 cm thickness. In order to avoid a sour taste from fermentation and less desirable gluten texture, Applicants have developed the claimed *Candida versatilis* MTCC 5155 strain to avoid the drawbacks of fermentation while maintaining a high level of phytase enzyme.

The present invention specifically imparts a solution to these problems in the prior art, and none of the cited art provides any teaching of such specific nutritionally improved product development.

The Siren patent discloses only a general method for reducing phytic acid level in food preparations using a source of phytase which "is generic and/or belongs to baker's yeast or Saccharomyces." Thus, as the Examiner admits, the Siren patent is lacking particular disclosure about the use of yeast cells belonging to the genus *Candida*. Further, Applicants observe that baker's yeast or *Saccharomyces* additionally is known to produce undesirable characteristics related to fermentation.

The Examiner cites Quan, et al. as teaching generically that yeast cells belonging to the ***genus*** *Candida* (and referring to the ***species*** *Candida krusei*) produce high level of phytase and are capable of biodegrading phytate in food materials including wheat. While admitting that even taken together, Siren and Quan, et al. are silent about preliminary permeabilization treatments of yeast cells to improve phytase activity, the Examiner makes no mention of any evidence or reasoning that would lead an ordinarily skilled artisan to select the ***species*** *Candida versatilis*, nor the ***strain*** MTCC 5155, to avoid the adverse effects of fermentation in making Chapathi. The Examiner provides no evidence of reasoning to show why the teaching of *C. krusei* in Quan, et al. in any way renders

obvious any *C. versatilis* ***species***, nor the claimed ***strain*** MTCC 5155.

To remedy these acknowledged deficiencies in the cited art, the Examiner further cites Bindu, et al. as teaching that permeabilization treatments provide for a larger amount of released enzymes and that repeated cycles of freeze-thawing are most efficient for enhancing phytase activity in yeast cell preparations. Bindu, et al. is silent as to the genus *Candida*, the species *Candida versatilis*, and the claimed *Candida versatilis* strain MTCC 5155.

Taken together, the cited references at best teach the generic state of the art prior to the present invention. As discussed above, the claimed subject matter relates to an improvement on the prior art, the use of mutant *Candida versatilis* ***strain*** MTCC 5155, which avoids several drawbacks found in prior art methods. The cited references do not teach or suggest either: (1) generally, the use yeast strains of the **species** *Candida versatilis*, (2) specifically the particular mutant ***strain*** MTCC 5155, nor (3) any suggestion to make a *Candida versatilis* strain which is genetically modified to avoid the described drawbacks in the prior art.

As discussed in the Response filed January 12, 2007, the claimed subject matter relates to a selection invention which is an improvement over the prior art. The cited references, and indeed the art as a whole as known to Applicants, does not teach or

suggest to one of ordinary skill in the art that an improved strain could or should be developed from the particular species *Candida versatilis*, or how one would go about developing a mutant *Candida versatilis* strain with the characteristics of increased phytase production and enhanced enzymatic activity which avoids the drawbacks of the prior art. Further, the cited references, and the art as a whole as known to Applicants, does not teach or suggest the claimed mutant strain MTCC 5155.

In summary, disclosure of a large genus (here of the yeast *Candida* genus) does not anticipate or render obvious a species within the genus, and particularly not a strain within the species which is genetically modified to have characteristics not shown in the prior art. Thus, in the absence of any teaching or suggestion in the cited references, alone or in combination, that an improved method of making Chapathi dough would use a yeast strain of the species *Candida versatilis*, as distinguished from the genus *Candida* generally, would use the species *Candida krusei*, and specifically would use the mutant strain MTCC 5155, the claims of the present application cannot be obvious over the cited art.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

CONCLUSION

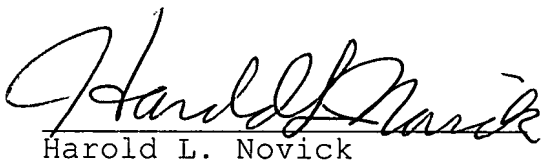
Based upon the above remarks, the presently claimed subject matter is believed to be clear and definite, fully enabled, and patentably distinguishable over the prior art of record. The Examiner is therefore respectfully requested to reconsider and withdraw the rejections of remaining claims 4-10 and allow all pending claims presented herein for reconsideration. Favorable action with an early allowance of the claims pending in this application is earnestly solicited.

The Examiner is welcomed to telephone the undersigned attorney if she has any questions or comments.

Respectfully submitted,

THE NATH LAW GROUP

Date: October 1, 2007

By: 

Harold L. Novick
Reg. No. 26,011
Lee C. Heiman
Reg. No. 41,827
Customer No. 20529

THE NATH LAW GROUP
112 S. West Street
Alexandria, VA 22314
TEL: (703) 548-6284
FAX: (703) 683-8396

in the proportions that they appear in the chemical equation describing the reaction. —**stoichiometric** *or* **stoicheiometric** *adj.*

stokes *symbol*: St; the cgs unit of **kinematic viscosity**; its use is now discouraged. In SI units, kinematic viscosity is measured in square metres per second; 1 St = 10^{-4} m^2 s^{-1}. [After (Sir) George Gabriel Stokes (1819–1903), British mathematician.]

Stokes' law of fluorescence a law stating that the wavelength of the emitted fluorescent light, λ_{em}, is greater than that of the light exciting the fluorescence, λ_{ex}. This relationship is true for most fluorescent materials; those for which it does not hold are termed **anti-Stokes**.

Stokes' law of viscosity a law stating that the frictional coefficient, f, of a spherical particle of radius r, moving through a liquid of viscosity η, is given by $f = 6\pi\eta r$.

Stokes' loss the loss of excitation energy available for fluorescence due to collision of molecules in the first excited state, S_1, with their neighbours, which results in a lower vibration level of S_1.

Stokes' shift the difference in wavelength between the excitation and emission maxima for a particular fluorescent substance. In quantitative form, Stokes' shift is $10^7(1/\lambda_{ex} - 1/\lambda_{em})$, where λ_{ex} and λ_{em} are the corrected maximum wavelengths for excitation and emission expressed in nanometres.

stoma (*pl.* **stomata**) any of the pores occurring in the epidermis of plants, particularly in leaves, through which gaseous exchange takes place.

stop codon any of the trinucleotide **codons**, UGA, UAG, and UAA, that signal the termination of translation of a messenger RNA molecule and the release of the nascent polypeptide chain. *See also* **termination codon**.

stopped-flow technique a method in which two solutions are caused to flow into a mixing chamber and then into an observation chamber, after which the flow is caused to stop abruptly and the time course of the chemical reaction can be followed, usually spectroscopically, as the mixture in the observation chamber ages. Critical features include the quality of mixing, the speed with which the mixed solution fills the observation volume, and the geometry of the observation volume in relation to the sensitivity of observation. *See also* **rapid-reaction kinetics**.

STOP protein *abbr. for* stable tubule only polypeptide; a protein that blocks the endwise dissociation of microtubules.

stop-transfer protein *see* **signal peptide**.

storage granule any small **organelle**, bounded by a membrane having a single lipid bilayer, that contains stored material. For example, mast-cell storage granules contain histamine, while those of pancreatic B cells contain insulin; in both cases the stored material is destined for secretion. This involves a stimulus applied to the cell that causes fusion of the granule membrane with the plasma membrane, followed by release of the granule contents by **exocytosis**.

storage polysaccharide any polysaccharide that serves as a form of stored energy in living organisms. Storage polysaccharides include starch, phytoglycogen (e.g. in maize), and fructosans (e.g. inulin) in plants, and glycogen in animals.

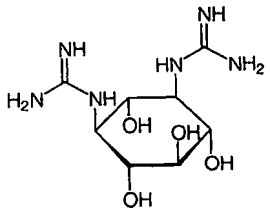
stp *or* **s.t.p.** *or* STP *abbr. for* standard temperature and pressure.

straight-chain describing any chain of carbon atoms in which none of the carbon atoms is directly bonded to more than two other carbon atoms.

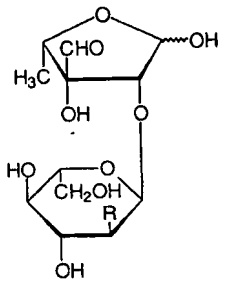
strain 1 a group of related individuals having certain characters that distinguish the members from other such groups within the same species or variety; a race. 2 a line of organisms descended or derived from a particular ancestral individual. 3 *(in physics)* the temporary or permanent deformation of a body resulting from an applied stress.

streptavidin a tetrameric biotin-binding protein (subunit M_r 14 500) produced by *Streptomyces avidinii*, capable of binding up to four molecules of **biotin** per molecule. It is useful in techniques such as enzyme-linked immunosorbent assay (ELISA), radioimmunoassay, immunocytochemistry, and protein blotting. It is also used with DNA probes as a detection reagent, where biotin can be incorporated into the molecule under study; streptavidin can then be used to bind to the biotin. The streptavidin may be labelled with **FITC**, gold, peroxidase, or another agent directly as a detection reagent. Alternatively, a biotin-labelled detection system (such as alkaline phosphatase) can be bound to streptavidin through another of its biotin-binding sites. Streptavidin has the advantage over **avidin** (also used in such techniques) of having a near-neutral isoelectric point (7.25–7.45); consequently its use results in less nonspecific binding. *See also* **biotinylation**.

streptidine 1,3-diguanido-2,4,5,6-cyclohexanetetrol; the non-carbohydrate component of **streptomycin**.



streptobiosamine 5-deoxy-2-*O*-[2-deoxy-2-(methylamino)-α-L-glucopyranosyl]-3-*C*-formyl-L-lyxose; a disaccharide component of **streptomycin**, containing **streptose** and *N*-methylglucosamine.



R = $NHCH_3$

Streptococcus a genus of Gram-positive, facultatively or obligately anaerobic cocci or coccoid bacteria, of biochemical significance for their production of **streptokinase**, **streptolysin**, and **streptodornase**.

streptodornase any of the extracellular deoxyribonucleases produced by streptococci. At least four such serologically distinct nucleases are known. Some or all have the characteristics of **deoxyribonuclease I** (EC 3.1.21.1), bringing about endonucleolytic cleavage of DNA to 5′-phosphodinucleotide and 5′-phosphooligonucleotide end-products. [From streptococcal deoxyribonuclease.]

streptokinase any of a number of extracellular proteins produced by certain streptococci; they exhibit no enzymic activity, despite the name. In human blood streptokinase forms a tight 1:1 complex with **plasminogen** that catalyses the activation of plasminogen to plasmin, and this in turn lyses fibrin clots. It has been used therapeutically after heart attacks and strokes. It is assumed that streptokinase assists the invasiveness of pathogenic streptococci. Example, streptokinase A precursor from *Streptococcus pyogenes*: database code STRP_STRPY, 440 amino acids (49.84 kDa); residues 1–26 are the signal, 27–440 the protein.

streptolydigin an antibiotic, derived from *Streptomyces lydicus*, that possesses potent antibacterial action, particularly against anaerobes and some Gram-positive aerobes. This is probably due to its inhibitory activity against bacterial **RNA**

इमटैक
IMTECH

सूक्ष्मजीव प्रौद्योगिकी संस्थान
सैक्टर 39-ए, चण्डीगढ़ 160 036 (भारत)
INSTITUTE OF MICROBIAL TECHNOLOGY
(A CONSTITUENT ESTABLISHMENT OF CSIR)
Sector 39-A, Chandigarh-160 036 (INDIA)

BY REGISTERED POST

Dr. G.S. Prasad
Scientist

01.06.2004

To

Dr. M C Varadaraj
Head, Human Resource Development
Central Food Technological Research Institute (CFTRI)
Cheluvamba Mansion
Mysore – 570 013. INDIA

Dear Dr. Varadaraj,

Your microbial culture has been accepted for deposit in MTCC-IDA under Budapest Treaty. It was assigned MTCC number and preserved, the details are as follows,

Name of the culture	Strain Designation		MTCC Number Assigned
Candida versatilis	CFR 505	=	MTCC 5155

Enclosed here with are the relevant documents of the strain,

Form BP/4 - Receipt and acceptance of the culture in MTCC

Form BP/9 - Viability statement of the culture

Three freeze-dried ampoules of the culture shall be sent to you in due course.

Please acknowledge the receipt of the forms.

Sincerely yours,

(G. S. PRASAD)

दूरभाष Phones : 695215 / 216 / 219 / 225 / 226 / 227, 690004, 690025, 690138, 690173, 690713, 690908, 692737
फैक्स : 0091-172-690585
Fax : 0091-172-690632
एस. टी. डी. कोड : STD CODE : 0172
तार : Gram : IMTECH
E-mail : system@imtech.res.in
Web : http://www.imtech.res.in

MTCC

BUDAPEST TREATY ON THE INTERNATIONAL RECOGNITION OF THE DEPOSIT OF MICROORGANISMS FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

To **Dr. M.C.Varadaraj** **Head, Human Resource Development** **Central Food Technological Research Institute (CFTRI)** **Cheluvamba Mansion** **Mysore – 570 031. INDIA** NAME AND ADDRESS OF THE DEPOSITOR	RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT issued pursuant to Rule 7.1 by the INTERNATIONAL DEPOSITARY AUTHORITY Identified at the bottom of this page

I. IDENTIFICATION OF THE MICROORGANISM

Identification reference given by the DEPOSITOR:	Accession number given by the INTERNATIONAL DEPOSITARY AUTHORITY:
Candida versatilis CFR 505	MTCC 5155

II. SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC DESIGNATION

The microorganism identified under I above was accompanied by :

(X) a scientific description

( ) a proposed taxonomic designation

(Mark with a cross where applicable)

III. RECEIPT AND ACCEPTANCE

This International Depositary Authority accepts the microorganism identified under I above,

which was received by it on 26. 05. 2004 (date of the original deposit)[1]

IV. RECEIPT OF REQUEST FOR CONVERSION

The microorganism identified under I above was received by this International Depositary Authority on _____ (date of the original deposit) and a request to convert the original deposit under the Budapest Treaty was received by it on _____ (date of receipt of request for conversion)

V. INTERNATIONAL DEPOSITARY AUTHORITY

Name: Dr. G.S.PRASAD

Address:
Microbial Type Culture Collection & Gene Bank
Institute of Microbial Technology
Sector 39-A, Chandigarh - 160 036
India

Signature(s) of person(s) having the power to represent the International Depositary Authority or of authorized official(s):

MTCC-an ID:
Institute of Microbial Technology
Sector 39-A, Chandigarh-160 036
INDIA

Date: 01-07-2004

[1] Where Rule 6.4(d) applies, such date is the date on which the status of International Depositary Authority was acquired

* Form MTCC BP/4 (sole page)

MTCC

BUDAPEST TREATY ON THE INTERNATIONAL RECOGNITION OF THE DEPOSIT OF MICROORGANISMS FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

To	
Dr. M.C.Varadaraj **Head, Human Resource Development** **Central Food Technological Research Institute (CFTRI)** **Cheluvamba Mansion** **Mysore – 570 031. INDIA** NAME AND ADDRESS OF THE PARTY TO WHOM THE VIABILITY STATEMENT IS ISSUED	VIABILITY STATEMENT issued pursuant to Rule 10.2 by the INTERNATIONAL DEPOSITARY AUTHORITY Identified on the following page

I. DEPOSITOR	II. IDENTIFICATION OF THE MICROORGANISM
Name: **Dr. M.C.Varadaraj** Address: **Head, Human Resource Development** **Central Food Technological Research Institute (CFTRI)** **Cheluvamba Mansion** **Mysore – 570 031. INDIA**	Accession number given by the INTERNATIONAL DEPOSITARY AUTHORITY MTCC 5155 Date of the deposit or of the transfer: 28-05-2004

III. VIABILITY STATEMENT

The viability of the microorganism identified under II above was tested

on 05.05.2004 [2] on that date, the said microorganism was

(X)[3] viable

(___)[3] no longer viable

[1] Indicate the date of the original deposit or, where the new deposit or a transfer has been made, the most recent relevant date (date of the new deposit or date of the transfer).

[2] In the cases referred to in Rule 10.2(a)(ii) and (iii), refer to the most recent viability test.

[3] Mark with a cross the applicable box

* Form MTCC BP/9 (first page)

IV. CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED[4]	
- Not Applicable -	
V. INTERNATIONAL DEPOSITARY AUTHORITY	
Name: Dr. G.S. PRASAD Microbial Type Culture & Gene Bank (MTCC) Address: Institute of Microbial Technology Sector 39-A, Chandigarh - 160 036 India	Signature(s) of person(s) having the power to represent the International Depositary Authority or of authorised official(s): GS Prasad MTCC at IDA Institute of Microbial Technology Sector 39-A, Chandigarh-160 036 INDIA Date: 01.07.2004

[4] Fill in if the information has been requested and if the results of the test were negative.

****